

## Porturillion

by Arya Akhavan (January 2013)

Angles for R.I. = 1.540

199 + 24 girdles = 223 facets

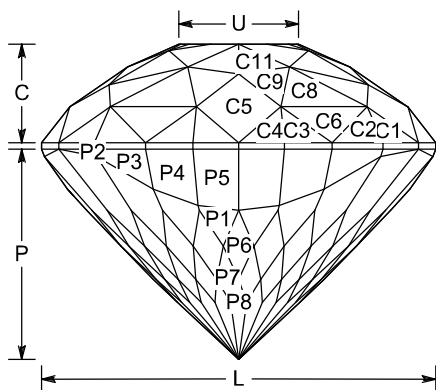
1-fold, mirror-image symmetry

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L/W = 1.033 T/W = 0.332 U/W = 0.314

P/W = 0.550 C/W = 0.257

Vol./W<sup>3</sup> = 0.296



### PAVILION

P1	48.02°	02-06-10-14-18-22-26-30-34-38-42-46-50-54-58-62-66-70-74-78-82-86-90-94	Cut to centerpoint.
G1	90.00°	13-19-45-51-77-83	Set stone size.
G2	90.00°	05-27-37-59-69-91	Meet P1, G1
G3	90.00°	03-29-35-61-67-93	Meet P1, G2
G4	90.00°	01-31-33-63-65-95	Meet P1, G3
P2	67.24°	13-19-45-51-77-83	Level girdle.
P3	69.34°	05-27-37-59-69-91	Level girdle.
P4	69.99°	03-29-35-61-67-93	Level girdle.
P5	70.31°	01-31-33-63-65-95	Level girdle.
P6	46.02°	96-04-08-12-16-20-24-28-32-36-40-44-48-52-56-60-64-68-72-76-80-84-88-92	Meet P1, P5 (only 3 facets meet)
P7	44.52°	02-06-10-14-18-22-26-30-34-38-42-46-50-54-58-62-66-70-74-78-82-86-90-94	Meet P1, P6
P8	43.00°	96-04-08-12-16-20-24-28-32-36-40-44-48-52-56-60-64-68-72-76-80-84-88-92	Meet P6, P7

### CROWN

C1	52.74°	13-19-45-51-77-83	Set girdle width.
C2	52.74°	05-27-37-59-69-91	Level girdle.
C3	52.74°	03-29-35-61-67-93	Level girdle.
C4	52.74°	01-31-33-63-65-95	Level girdle.
C5	50.00°	96-32-64	Meet G4, C4
C6	49.85°	04-28-36-60-68-92	Meet G2, G3, C2, C3
C7	44.95°	16-48-80	Meet G1, C1; C1, C2, C6
C8	43.72°	04-28-36-60-68-92	Meet C1, C2, C6, C7; C3, C4, C5, C6
C9	42.90°	03-29-35-61-67-93	Meet C3, C4, C5, C6, C8
C10	31.38°	10-22-42-54-74-86	Meet C1, C2, C6, C7, C8
C11	32.25°	02-30-34-62-66-94	Meet C5, C9; C8, C9, C10
C12	27.49°	11-21-43-53-75-85	Meet C7, C10; C8, C9, C10, C11
C13	23.27°	09-23-41-55-73-87	Meet C8, C9, C10, C11, C12
C14	15.76°	12-20-44-52-76-84	Meet C12, C13
T	0.00°	Table	Meet C11, C13

Looking for an excessive Portuguese-style trillion with rounded corners? This design is a hybrid barion-Portuguese with a high crown and deep pavilion, designed for lighter larger materials. Should be excellent for larger quartz or topaz crystals, and has done well in medium-high saturation citrine. Works in materials from quartz to CZ (RI = 1.54 - 2.16), but is really intended for large pale things like topaz.

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